CLAIMS

[001] A dishwasher (14) comprising a washing container (1), devices (11) for applying rinsing liquor (4) to the items to be washed in the washing container (1), and at least one wash program comprising partial program steps e.g. "pre-wash", "clean", "intermediate rinse" and "clear rinse", characterised in that a gas having an oxidising effect is added to the rinsing liquor (4) or the raw water and/or into the interior (3) of the washing container (1) for use for a partial program step having a cleaning effect, e.g. "clean" so that the gas can at least be used for cleaning and disinfection.

[002] The dishwasher (14) according to claim 1, characterised in that the gas having an oxidising effect can be applied to the items to be washed in cooperation with mist in the interior (3) of the washing container (1).

[003] The dishwasher (14) according to claim 2, characterised in that the mist can be produced from rinsing liquid (4) or raw water by a nebulising device, e.g. an ultrasound nebuliser (5) or a nebulising nozzle.

[004] The dishwasher (14) according to claim 3, characterised in that gas having an oxidising effect is already added to the rinsing liquor (4) or the raw water which is supplied to the nebulising device.

[005] The dishwasher (14) according to claim 3, characterised in that no gas having an oxidising effect is already added to the rinsing liquor (4) or the raw water which is supplied to the nebulising device and the gas having an oxidising effect is added directly to the interior (3) of the washing container (4).

[006] The dishwasher (14) according to any one of the preceding claims, characterised in that the gas having an oxidising effect is added to the rinsing liquor (4) for solution and reaction, using a porous membrane (12) in the rinsing liquor, preferably at the bottom of the washing container (1).

[007] The dishwasher (14) according to any one of the preceding claims, characterised in that the gas having an oxidising effect is added to the rinsing liquor (4) for solution and reaction using a water jet diffuser for fine distribution of the gas.

[008] The dishwasher (14) according to any one of the preceding claims, characterised in that the water jet pump is disposed in the raw water pipe or in the circulating pipe for acting upon the devices (11) for applying rinsing liquor (4) to the items to be washed, wherein preferably only a portion of the raw water or the rinsing liquor (4) is passed to a branch.

[009] The dishwasher (14) according to any one of the preceding claims, characterised in that gas having an oxidising effect is added to the rinsing liquor (4) or the raw water in the rinsing liquor reservoir and/or the heat exchanger (9) for disinfection, to prevent growth of bacteria in the rinsing liquor reservoir and/or heat exchanger (9).

[010] The dishwasher (14) according to any one of the preceding claims, characterised in that the gas having an oxidising effect is ozone which is produced in an ozone generator (6).

[011] A method for using a gas having an oxidising effect in a dishwasher having at least one wash program comprising partial program steps e.g. "pre-wash", "clean", "intermediate rinse" and "clear rinse", characterised in that a gas having an oxidising effect is added to the rinsing liquor (4) or the raw water and/or into the interior (3) of the washing container (1) for use for a partial program step having a cleaning effect, e.g. "clean" so that the gas can at least be used for cleaning and disinfection.

[012] The method according to claim 11, characterised in that the gas having an oxidising effect can be applied to the items to be washed in cooperation with mist in the interior (3) of the washing container (1).

[013] The method according to claim 12, characterised in that the mist can be produced from rinsing liquid (4) or raw water by a nebulising device, e.g. an ultrasonic nebuliser (5) or a nebulising nozzle.

[014] The method according to claim 13, characterised in that gas having an oxidising effect is already added to the rinsing liquor (4) or the raw water which is supplied to the nebulising device.

[015] The method according to claim 13, characterised in that no gas having an oxidising effect is already added to the rinsing liquor (4) or the raw water which is supplied to the nebulising device and the gas having an oxidising effect is added directly to the washing container (4).

[016] The method according to any one of claims 11 to 15, characterised in that the gas having an oxidising effect is added to the rinsing liquor (4) for solution and reaction, using a porous membrane (12) in the rinsing liquor, preferably at the bottom of the washing container (1).

[017] The method according to any one of claims 11 to 16, characterised in that the gas having an oxidising effect is added to the rinsing liquor (4) for solution and reaction using a water jet pump with a diffuser for fine distribution of the gas.

[018] The method according to any one of claims 13 to 17, characterised in that the surface tension of the rinsing liquor (4) is lowered by adding tensides to the rinsing liquor (4) and the effect of the ultrasonic nebuliser (5) is thereby enhanced.

[019] The method according to any one of claims 11 to 18, characterised in that the gas having an oxidising effect is ozone which is produced in an ozone generator (6).

[020] Use of ozone-enriched mist in a washing container (1) of a dishwasher (14) at least for cleaning items to be washed.